

Childhood Blindness Indicators For Monitoring & Evaluating Progress Towards VISION 2020

Suggested indicators discussed at AED stakeholders meeting
Kilimanjaro Centre for Community Ophthalmology
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Background

VISION 2020 has defined targets for eliminating avoidable blindness in children. Strategies for achieving some of these (most notably, vitamin A deficiency related corneal scarring) have been well developed and there are often systems in place for monitoring achievement. For others, while there are targets available, there has been no mention of indicators and how they will be compiled and used.

At the request of the Academy for Educational Development (AED), who support a number of childhood blindness initiatives worldwide a small group of stakeholders met at the KCCO to review existing VISION 2020 targets and any indicators identified for each. When not identified in various VISION 2020 documents, the group proposed indicators. Also, it was recognized that there was little mention of low vision care and inclusive education in existing VISION 2020 targets. Accordingly, the group proposed a few that might be useful.

The outcome of the workshop should be useful for AED in providing guidance for programmes it supports as well as the wider VISION 2020 community.

Target (reference)	Indicator	Who is responsible for collecting data
Eliminate corneal scarring caused by vitamin A deficiency (1)	Number of children recognized with vitamin A deficiency related eye disease.	Routine monthly reporting (from the VISION 2020 "district" to the National Prevention of Blindness Committee)
Eliminate corneal scarring caused by ophthalmia neonatorum (1)	Number of children recognized with ophthalmia neonatorum	Routine reporting (from the VISION 2020 "district" to the National Prevention of Blindness Committee)
Eliminate new cases of rubella syndrome (1)	Number of children with cataract who have evidence (using WHO	Child eye health tertiary facility (CEHTF: facility providing paediatric

	clinical criteria—see #3 below) of congenital rubella syndrome	cataract surgery)
Provide appropriate surgery to all children with congenital or developmental cataract, with immediate and effective optical correction, in suitably equipped specialist centers. (1)	<p>There are 5 separate indicators regarding children with congenital or developmental cataract:</p> <ol style="list-style-type: none"> 1. Childhood cataract surgical rate (CCSR; please see #2 below for information on how to calculate) 2. Number of CEHTF centers in the country 3. Quality of post-operative care (defined as the proportion of children receiving follow up 3-6 months after surgery) 4. Provision of post-operative spectacles (defined as the proportion of children receiving surgery in the year who were provided with spectacles) 5. Visual outcome (defined as the proportion of eyes with vision $\geq 6/18$ at most recent follow up) 	<p>CEHFT to report this information on an annual basis to the National Prevention of Blindness Committee. The CCSR should be provided by VISION 2020 “district”.</p> <p>Information on quality of post-operative care, provision of spectacles, and clinical outcome (from patient files) should be compiled on an annual basis.</p>
Ensure that all babies at risk of R.O.P have a fundus examination by a trained observer 6-7 weeks after birth. (1)	<ol style="list-style-type: none"> 1. Number (and %) of neonatal units with ROP screening programs 2. Number of children blind from ROP 	Child eye health tertiary facility (CEHTF: facility providing ROP screening and treatment)
In countries where myopia has been recognized as a public health problem, see that all school have a simple vision screening examination, and that glasses are provided to all who have significant refractive error. (1)	Number of spectacles provided (only include those with a power less than or equal to -2 or greater than or equal to $+4$)	Routine monthly reporting (from the VISION 2020 “district” to the National Prevention of Blindness Committee)
All children enrolled in schools for the blind have been clinically assessed.	Proportion of newly enrolled children in schools for the blind who have referral letters from qualified eye care provider	VISION 2020 “district” team leader to visit each school for the blind or annex in their “district” about one month after the

		start of the school year. Information collected to be reported to the National Prevention of Blindness Committee
All school aged children with apparent vision problems (after medical, surgical intervention, and spectacle correction) should be assessed for low vision services and educational placement	Number of children with low vision devices in normal schools, annexes, and schools for the blind	All low vision providers report to the National Prevention of Blindness Committee on an annual basis (information collected on "district" of residence of child)

1. VISION 2020 Tool Kit (CD)
2. To calculate a "childhood cataract surgical rate" (CCSR) divide the number of children residing in a region who received surgery for non-traumatic cataract in a given calendar year by the total population of the region (in millions) x 1 million. This is the number of children having surgery per million population. Thus, the CCSR is similar to the (adult) cataract surgical rate (CSR) with the notable difference that the CCSR is based upon children receiving surgery while the CSR is based upon "eyes" receiving surgery.
3. WHO Clinical Definition of Congenital Rubella Syndrome:

Suspected CRS: Child age 0-17 months with maternal history of suspected or confirm rubella during pregnancy and/or detection of at least one of the following clinical signs; congenital heart disease, suspicion of deafness, cataract, glaucoma, pigmentary retinopathy, purpura, splenomegaly or microcephaly.

Clinically confirmed CRS: Child age 0-17 months detected with two of the clinical signs in group "A" or one from group "A" and one from group "B". Group consists of cataract, congenital glaucoma, pigmentary retinopathy, congenital heart disease or hearing loss. Group "B" consists of purpura, splenomegaly, microcephaly, mental retardation, meningoencephalitis, radiolucent bone disease, or jaundice occurring within 24 hours after birth.